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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,726	02/25/2002	Kenneth J. Newell	USA.286-1	
7590 01/16/2004			EXAMINER	
Ralph D' Alessandro 3D Systems, Inc.			TENTONI, LEO B	
26081 Avenue Hall			ART UNIT	PAPER NUMBER
Valencia, CA 91355			1732	
			DATE MAILED: 01/16/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Symmony	10/084,726	NEWELL ET AL.				
Office Action Summary	Examiner	Art Unit				
	Leo B. Tentoni	1732				
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication If the period for reply specified above is less than thirty (30) days, a r - If NO period for reply is specified above, the maximum statutory perions - Failure to reply within the set or extended period for reply will, by state - Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).  Status	N. 1.136(a). In no event, however, may a reply be tirely within the statutory minimum of thirty (30) day and will expire SIX (6) MONTHS from tule, cause the application to become ABANDONE	nely filed s will be considered timely. I the mailing date of this communication. D (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on	·					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-27</u> is/are pending in the application	on.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>16-27</u> is/are allowed.	)⊠ Claim(s) <u>16-27</u> is/are allowed.					
6)⊠ Claim(s) <u>1-8 and 11-15</u> is/are rejected.						
7)⊠ Claim(s) <u>9 and 10</u> is/are objected to.						
8) Claim(s) are subject to restriction and	l/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Exami	ner.					
10)⊠ The drawing(s) filed on <u>25 February 2002</u> is/a	are: a)⊠ accepted or b)⊡ objecte	d to by the Examiner.				
Applicant may not request that any objection to the	ne drawing(s) be held in abeyance. See	∍ 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the corre	ection is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the	Examiner. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. §§ 119 and 120						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Buree * See the attached detailed Office action for a list 13) Acknowledgment is made of a claim for domes since a specific reference was included in the first sentence of 14) Acknowledgment is made of a claim for domes reference was included in the first sentence of	ints have been received. Ints have been received in Applicationity documents have been received au (PCT Rule 17.2(a)). Ints of the certified copies not received stic priority under 35 U.S.C. § 119(a) first sentence of the specification or provisional application has been receitic priority under 35 U.S.C. §§ 120	on No  ed in this National Stage  ed.  e) (to a provisional application)  in an Application Data Sheet.  eived.  and/or 121 since a specific				
Attachment(s)	_					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s)</li> </ol>	5) Notice of Informal P 02/25/2002; 6) Other:	(PTO-413) Paper No(s) atent Application (PTO-152)				
10/23/2002 S. Patent and Trademark Office						

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#### DETAILED ACTION

### Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-8 and 11-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8, 11, 13-15 and 42-44 of copending Application No. 09/970,727. Although the conflicting claims are not identical, they are not patentably distinct from each other because providing a temperature controllable environment having an initial temperature above the melting point of the non-curable phase change composition would have been obvious to one of ordinary skill in the art at the time the invention was made principally in order to melt the support structure; holding the temperature of the controllable environment above the melting point of the non-curable phase change composition would have been obvious to one of ordinary

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skill in the art at the time the invention was made principally in order to melt and remove the support structure; lowering the temperature of the object at a rate wherein a temperature differential within regions of the object does not exceed about 5°C would have been obvious to one of ordinary skill in the art at the time the invention was made principally in order to avoid imparting additional stresses and strains onto the object.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-8 and 11-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 16-23, 26, 28-30 and 45-47 of copending Application No. 09/970,727. Although the conflicting claims are not identical, they are not patentably distinct from each other because providing a temperature controllable environment having an initial temperature above the melting point of the non-curable phase change composition would have been obvious to one of ordinary skill in the art at the time the invention was made principally in order to melt the support structure; holding the temperature of the controllable environment above the melting point of the non-curable phase change composition would have been obvious to one of ordinary skill in the art at the time the invention was made principally in order to melt and remove the support structure; lowering the temperature of the object at a rate wherein the temperature of

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the regions of the object remain substantially equal would have been obvious to one of ordinary skill in the art at the time the invention was made principally in order to avoid imparting additional stresses and strains onto the object.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-8 and 11-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 31-38, 40, 41 and 48-50 of copending Application No. 09/970,727. Although the conflicting claims are not identical, they are not patentably distinct from each other because providing a temperature controllable environment having an initial temperature above the melting point of the non-curable phase change composition would have been obvious to one of ordinary skill in the art at the time the invention was made principally in order to melt the support structure; holding the temperature of the controllable environment just above the freezing point of the phase change component until the temperature of all of the regions of the object substantially equalize would have been obvious to one of ordinary skill in the art at the time the invention was made principally in order to avoid imparting additional stresses and strains onto the object.

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This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

## Allowable Subject Matter

- 5. Claims 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. Claims 16-27 are allowable over the prior art references presently of record.
- 7. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art references, alone or in combination, disclose, suggest or teach a process of post processing an article formed by solid freeform fabrication to remove a support structure including the step of submersing an article in a fluid medium in a temperature controllable environment at a temperature above the melting point of the phase change component, the phase change component being at least partially soluble in the fluid medium as set forth in instant independent claim 16.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B. Tentoni whose telephone number is (571) 272-1209. The examiner

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can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0987.

Leo B. Tentoni Primary Examiner

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lbt